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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/576,022	05/23/2000	Erik L. Wallace	20-430	4391

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EXAMINER

BEAMER, TEMICA M

ART UNIT PAPER NUMBER

2681

DATE MAILED: 01/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/576,022	Applicant(s) WALLACE ET AL.	
	Examiner Ternica M. Beamer	Art Unit 2681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-28 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 8, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bar et al (Bar), U.S. Patent No. 6,456,852 in view of Thomas, U.S. Patent Pub. No. 2003/0060212.

Regarding claim 1, Bar discloses a mobility activity status tracker comprising: a database relating to individual wireless device subscribers; a communications channel to allow entry of data into said database via a signaling transfer point; and a TCP/IP communications channel for communicating information contained in said database to at least one application server (20) over at least one of an Internet and an Intranet, said at least one application server is user accessible to determine at least one of presence information and location information of a wireless device (col. 2, lines 13-39, col. 2, line 63-col. 3, line 24, col. 5, lines 25-31).

Bar, however, fails to disclose the database disclosing historical location data of an individual subscriber.

In a similar field of endeavor, Thomas discloses a system and method for location tracking. Thomas further discloses wherein a database records historical location data of a subscriber (0047).

At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify Bar with the teachings of Thomas for the purpose of keeping a log of subscriber movement for an extended period of time.

Regarding claim 2, the combination of Bar and Thomas discloses the mobile activity status tracker according to claim 1, wherein: said communications channel utilizes a TCP/IP communications protocol (Bar, col. 3, lines 6-9).

Regarding claim 8, the combination of Bar and Thomas discloses the mobile activity status tracker the mobile activity status tracker according to claim 1, wherein: said mobile activity status tracker is inherently external to a Home Location Register servicing said individual wireless device subscribers as evidenced by the fact that HLR's are inherent to cellular systems (Bar, figure 1).

Regarding claim 11, the combination of Bar and Thomas discloses the mobile activity status tracker according to claim 1, wherein: said mobile activity status tracker is adapted to compare a temporary record with entries in said database to determine any changes in activity status relating to a relevant wireless device and overwrite an existing record with said temporary record if a change in activity status is determined (as

evidenced by the fact that the system is continuously updated with the most recent information) (col. 2, line 67-col. 3, line 5).

Regarding claim 12, the combination of Bar and Thomas discloses the mobile activity status tracker according to claim 11, wherein: said mobile activity status tracker is further adapted to forward relevant information relating to said determined changes in activity status to at least one relevant application server (col. 2, line 63-col. 3, line 5).

4. Claims 3, 4, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bar in view of Thomas and further in view of Gossman et al (Gossman), U.S. Patent No. 6,181,935.

Regarding claims 3, 4, 9 and 10, the combination of Bar and Thomas discloses the mobile activity status tracker of claims 1 as described above. the combination of Bar and Thomas, however fails to disclose the protocol for transferring information between the communication systems in claims 3, 4, 9 and 10 as being Signaling System #7 (SS7) and IS-41 compliant.

In a similar field of endeavor, Gossman discloses a system, which enables seamless roaming for wireless subscribers with cooperation from various entities such as an HLR (col. 3, lines 30-53, col. 4, lines 1-12).

Gossman further discloses wherein communication between the various entities in the communication network utilize the SS7 protocol and is IS-41 compliant (col. 3, lines 62-67, col. 4, lines 17-22 and col. 11, lines 38-43).

At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify the combination of Bar and Thomas with the teachings of Gossman since such protocols are well known in the art to interconnect mobile controllers to transfer data (Gossman, col. 62-67).

5. Claims 5, 6, 13-15, 18-21 and 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bar in view of Thomas and further in view of Berggren et al (Berggren), U.S. Patent No. 6,073,015.

Regarding claim 5, the combination of Bar and Thomas discloses the mobile activity status tracker according to claim 1 as described above. The combination of Bar and Thomas, however, fails to disclose wherein: said data entered into said database is previously forwarded by a Home Location Register.

In a similar field of endeavor, Berggren discloses a system and method of providing services when the mobile is home registered in a microcellular network and receives support from a macrocellular network.

Berggren further discloses wherein data entered into a location database is previously forwarded by a Home Location Register (col. 8, lines 19-55).

At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify the combination of Bar and Thomas with the teachings of Berggren since it is known that the HLR keeps an accurate record of a mobile devices location. Such a feature would enhance the accuracy of the location information in the database.

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Regarding claim 6, the combination of Bar, Thomas and Berggren discloses the mobile activity status tracker according to claim 5, wherein: said Home Location Register is one of a stand-alone Home 5 Location Register and an Integrated Home Location Register (HLR) (Berggren, figure 1).

Regarding claims 13, 19 and 25, Bar discloses a method of providing a database of presence or location information regarding wireless system subscribers, transmitting at least one of presence and location information relating to at least one wireless system subscriber to at least one application server via at least one of an Internet and an Intranet, said at least one application server is user accessible to determine at least one of presence information and location information.

Bar, however, fails to disclose: forwarding a registration notification message from a Home Location Register to a mobile activity status tracker.

Berggren discloses this limitation (col. 8, lines 30-55).

At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify Bar with the teachings of Berggren since it is known that the HLR keeps an accurate record of a mobile devices location and registration information. Such a feature would enhance the accuracy of the location information in the database.

Bar also fails to disclose the database disclosing historical location data of an individual subscriber.

Thomas discloses wherein a database records historical location data of a subscriber (0047).

At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify Bar with the teachings of Thomas for the purpose of keeping a log of subscriber movement for an extended period of time.

Regarding claims 14, 20 and 26, the combination of Bar, Thomas and Berggren discloses the method of providing a database of presence and location information regarding wireless system subscribers according to claims 13, 19 and 25, further comprising: comparing a temporary record with entries in said database to determine any changes in activity status relating to a relevant wireless device; and at least one of overwriting an existing record with said temporary record if a change in activity status is determined and keeping a log of at least one of history of activity and registration for at least one wireless subscriber (Bar, col. 2, line 67-col. 3, line 5).

Regarding claims 15 and 21 the combination of Bar, Thomas and Berggren discloses the method of providing a database of presence and location information regarding wireless system subscribers according to claims 14 and 20, wherein: said registration notification message is forwarded through a signaling transfer point between said Home Location Register and said mobile activity status tracker (Berggren, col. 8, lines 19-55).

Regarding claims 18 and 24, the combination of Bar, Thomas and Berggren discloses the method of providing a database of presence and location information regarding wireless system subscribers according to claims 14 and 20 wherein: said Home Location Register is one of a stand-alone Home Location Register and an Integrated Home Location Register (HLR) (Berggren, figure 1).

Regarding claim 27, the combination of Bar, Thomas and Berggren discloses the apparatus for providing a database of presence and location information regarding wireless system subscribers according to claim 26, wherein said means of copying and forwarding sends said copied registration notification message over a TCP/IP connection to said mobile activity status tracker (Bar, col. 2, lines 24-39, col. 3, lines 6-9).

6. Claims 7, 16, 17, 22, 23 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bar in view of Berggren and Thomas as applied to claims 6, 14, 20 and 26 above, and further in view of Gossman et al (Gossman), U.S. Patent No. 6,181,935.

Regarding claim 7, the combination of Bar, Thomas and Berggren discloses the mobile activity status tracker of claim 6 as described above. The combination, however, fails to disclose wherein the HLR is integrated with a message servicing center on a common platform.

Gossman discloses this limitation (col. 9, lines 55-65; figure 1).

At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify the combination of Bar, Thomas and Berggren with the teachings of Gossman since it is known in the art to integrate multiple systems into one. Such integration requires only routine skill in the art.

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Regarding claims 16, 17, 22 and 23, the combination of Bar, Thomas and Berggren discloses providing a database of presence and location information regarding wireless system subscribers according to claims 14 and 20 as described above.

The combination, however, fails to disclose the use of SS7 and IS-41 protocols for transmitting messages.

In a similar field of endeavor, Gossman discloses a system, which enables seamless roaming for wireless subscribers with cooperation from various entities such as an HLR (col. 3, lines 30-53, col. 4, lines 1-12).

Gossman further discloses wherein communication between the various entities in the communication network utilize the SS7 protocol and is IS-41 compliant (col. 3, lines 62-67, col. 4, lines 17-22 and col. 11, lines 38-43).

At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify the combination of Bar, Thomas and Berggren with the teachings of Gossman since such protocols are well known in the art to interconnect mobile controllers to transfer data (Gossman, col. 62-67).

Regarding claim 28, the combination of Bar, Thomas and Berggren discloses the apparatus for providing a database of presence and location information regarding wireless system subscribers as described above and further discloses said means for copying and forwarding said copied registration notification message over a TCP/IP connection to said mobile activity status tracker (Bar, col. 2, line 67-col. 3, line 5, Berggren, col. 4, lines 46-56, col. 10, line 42-col. 11, line 1). The combination, however,

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fails to disclose wherein said registration notification message is sent to said HLR using the SS7 protocol.

Gossman discloses wherein communication between various entities in the communication network utilize the SS7 protocol (col. 3, lines 62-67, col. 4, lines 17-22 and col. 11, lines 38-43).

At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify the combination of Bar, Thomas and Berggren with the teachings of Gossman since the SS7 protocol is very well known in the art to interconnect mobile controllers to transfer data (Gossman, col. 3, lines 62-67).

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Temica M. Beamer whose telephone number is (571) 272-7797. The examiner can normally be reached on Monday-Thursday (alternate Fridays) 7:00am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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